BÖLÜM 24

TİROİD VE PARATROİD HORMONLARININ KARDİYOVASKÜLER SİSTEM ÜZERİNE ETKİLERİ

Elif TUNÇ AYDIN[1]

TİROİD HORMONLARININ KARDİYOVASKÜLER SİSTEM ÜZERİNE ETKİLERİ

Kardiyovasküler hastalıklar, günümüzde dünya çapında en önde gelen ölüm nedenlerinden birini oluşturmakadır. Tiroid hormon reseptörlerinin hem miyokardiyal hem de vasküler endotelyal dokularda mevcut olduğu ve böylece tiroid hormon konsantrasyonlarındaki değişikliklerin uç organ aktivitesini modüle etmesine olanak sağladığı göz önüne alındığında, tiroid hormonlarının -özellikle anormal olduğunda- kardiyovasküler hastalığı başlatma ve ağırlaştırmadaki rolü aşikardır.

Moleküler ve Hücresel Mekanizmaları

Tiroid hormonlarının başta kalp olmak üzere kardiyovasküler sistem üzerinde, çok çeşitli etkileri vardır.

Bu etkileri 3 farklı yolla gösterirler:

1. Nükleer reseptörlere bağlanma yoluyla kardiyomiyositlerde doğrudan genomik etkiler yaparlar; Ana etkilerin birçoğu, nükleer reseptörler aracılığıyla hedef genlerin promotör bölgesinde bulunan tiroide duyarlı elementlere (TRE'ler) bağlanarak etki gösteren T3 tarafından ortaya çıkarılır (1). Bu da hedef genlerin ekspresyonunun düzenlenmesine yol açar; T3, çekirdekteki THR'ler (tiroid hormonu reseptörleri) üzerinde etki ederek 9-cis-retinoik asit

[1] Uzm. Dr., Atatürk Eğitim ve Araştırma Hastanesi Kardiyoloji Kliniği, mdeliftunc@gmail.com

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